WATER TAP

WASHINGTON'S DRINKING WATER NEWSLETTER

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

Volume 22, #5 - Dec. 2007

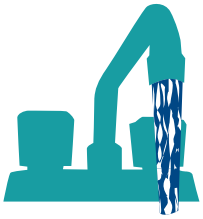
Tap into Goodness:
Building Trust in Tap Water

Washington water utilities work hard to serve safe and reliable drinking water. Yet it seems many of your customers don't know it.

In a telephone survey the Office of Drinking Water (ODW) commissioned in April, more than 1,600 people throughout Washington were asked, "Which do you trust more, bottled water, tap water, or both equally?"

Fully 52 percent said they trust bottled water more. Only 31 percent said they trust tap water more. And many of those who trust their tap water more are on private wells.

Why is this a problem? After all, even if people choose to drink bottled water, they still need water to take baths, flush toilets and water lawns. Very little water served is actually used for drinking or food preparation. Why should utilities care whether their customers enjoy drinking the water they serve?



It's simple, really. If people value your product, they will be more willing to pay a

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The importance of continuing education

Since July 2002, the federally funded tuition reimbursement grant has helped to fund training for small-system operators. Our federal training grant and low-cost courses supplied to systems serving 3,300 or less end December 31, 2007.

Beginning January 1, 2008, systems will be paying full price for training courses offered by Washington trainers. So decision makers for small systems need to determine how they will fully fund the training their operators need to meet the professional growth requirement for the state's Water Works Operator Certification Program.

Professional growth requirements

The Office of Drinking Water requires all certified operators to meet the professional growth requirement to remain certified. There are several ways to meet the requirement during a professional growth-reporting period.

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The Director's Column

by Denise Addotta Clifford

We've seen a number of high-profile drinking water events this year, including an act of vandalism that led to shutting down one city's water supply, high turbidity that threatened another, and water contamination at a beef processing plant. As a result of these incidents, we've identified five major areas every water system should think about:

Communication

Clear, reliable communication can make all the difference in how well your system handles an emergency. Yet communication doesn't just happen. It requires planning before emergencies occur.

There's no substitute for practicing the art of communication. Talking through potential situations in a training setting will pay off in better understanding and more efficiency in responding to emergencies. To help in this process, the state Department of Health has several communications planning resources posted at http://www.doh.wa.gov/phepr/toolkit/ (click on "First Response" for tools and templates to help you with emergency communication planning)

Incident Command System

The incident command structure has become the standard for emergency management in Washington and across the nation. This model, developed in the 1970s after a series of catastrophic fires in California, can be adapted for all types of situations. To learn more, visit https://training.fema.gov/EMIWeb/IS/ICSResource/assets/reviewMaterials.pdf

Inter-agency coordination

Emergency response plans should include how you will communicate within your agency, with other agencies such as law enforcement and fire departments, and with state and local health departments.

We recommend you start your readiness evaluation by looking at your relationship with your local health agency. Do you know who to call? Do you know how they're prepared to assist you? Talk with them about areas where you're likely to be working together, such as what happens to restaurants, schools and hospitals that receive your water.

The state Office of Drinking Water should also be high on your call list in an emergency. Our after-hours emergency hotline is (877) 481-4901. We'll offer guidance and help you obtain the resources you'll need. If other agencies regulate your water, contact them as well.

Common mission and goals

When emergencies occur, emotions run high. It is important to remember that we have a common purpose: protecting the public. Planning and coordination with other agencies can help us reach a better understanding of each others' missions and roles and avoid misunderstandings in a crisis.

The business connection

If you run a business that happens to have its own water system, a water contamination event can have serious bottom-line consequences. Convenience stores, day-care centers and food producers, among others, could have customer confidence in their businesses seriously harmed if the water goes bad.

Have you looked closely at your water system lately? Does it need attention? You can prevent a great deal of expense and disruption to your business by making it a high priority to properly maintain and monitor your drinking water supply.

Denise A. Clifford

Communities honored for fluoridating drinking water

Six Washington water systems were honored at the National Oral Health Conference this year by the American Dental Association, the American Association of State and Territorial Dental Directors and the Centers for Disease Control and Prevention.

50-Year Awards – Five communities in Washington were among 106 recipients in 32 states recognized for 50 years of continuous water fluoridation.

- Forks
- Fort Lewis
- Longview
- Pullman
- Woodland

Community Initiative Award – Skagit County was among 13 communities in seven states recognized for adopting water fluoridation in 2003.

Fluoride is a naturally-occurring mineral found in all water sources (lakes, rivers, groundwater and oceans). Community water fluoridation is the process of adjusting the natural fluoride concentration to one part per million, the level recommended for optimal oral health.

In Washington, fluoridation is not required; each community decides for itself whether to fluoridate its drinking water.

Current scientific research indicates that fluoridation is a cost-effective, practical and safe way to prevent tooth decay and improve oral health for children and adults. Public health officials consider fluoridation of drinking water one of the 10 great public health achievements of the 20th century. It reduces tooth decay by 20 to 40 percent, even in an era with widespread availability of fluoride from other sources, such as fluoride toothpaste.

Water fluoridation has helped improve the quality of life in the U.S. through:

- Reduced pain and suffering related to tooth decay.
- Reduced time lost from school and work.
- Less money spent to restore, remove or replace decayed teeth.

About 170 million people in the U.S. are served by fluoridated public water systems. The average cost for a community to fluoridate its water ranges from about 50 cents a year per person in large communities to about $3 a year per person in small communities. For most communities, every $1 invested in water fluoridation saves $38 in dental treatment costs.

Emergency response and security Web pages

The Office of Drinking Water Web site offers many tools, links and other resources to help water systems with their emergency response and planning efforts.

Water system security – We designed this Web page to help water systems understand new rules that may affect them, and to centralize the growing library of security information and resources available to help water utilities stay current with water system security issues. Visit us online at http://www.doh.wa.gov/ehp/dw/Security/water_system_security.htm

Drinking water emergencies – This Web page contains information to help you manage health advisories, prepare for natural disasters and provide emergency drinking water sources. Visit us online at http://www.doh.wa.gov/ehp/dw/our_main_pages/dwflood.htm

2008 Operator Certification Exam Schedule

Dates, times and locations are subject to change due to site availability. Applicants will receive a letter four to six weeks before the exam date.

Exam Locations and Dates				Application Deadlines	Retake Application Deadlines
Bellingham Port Angeles Seattle Spokane Vancouver Yakima	Olympia Seattle Wenatchee	Mount Vernon	Olympia Pasco		
February 5, 2008	February 6, 2008	February 6, 2008	February 7, 2008	November 7, 2007	December 5, 2007
June 3, 2008	June 4, 2008	June 4, 2008	June 5, 2008	March 5, 2008	April 4, 2008
October 7, 2008	October 8, 2008	October 9, 2008	October 9, 2008	July 9, 2008	August 8, 2008

If you have questions about the examination process, or to order an application packet, call Larry Granish at (800) 525-2536, ext. 1, or e-mail larry.granish@doh.wa.gov You can also order an application packet online at http://www.doh.wa.gov/ehp/dw/our_main_pages/opcertification.htm

Backflow Assembly Tester Exam Schedule

BAT Certification Examinations		BAT Professional Growth Examinations	
3rd Monday of each month, *except holidays*		**3rd Friday of each month,** *except holidays*	
Auburn Station and Spokane		**Auburn Station and Spokane**	
Jan. 14, 2008*	Feb. 11, 2008*	Jan. 18, 2008	Feb. 15, 2008
March 17, 2008	April 21, 2008	March 21, 2008	April 18, 2008
May 19, 2008	June 16, 2008	May 16, 2008	June 20, 2008

For information, call Certification Services at (800) 562-0858 toll-free in Washington only, (253) 288-3369, or visit Certification Services online at http://www.wacertservices.org/ Additional examination dates or locations may be added based on availability and demand.

***Second Monday due to holiday.**

System operators lose licenses for negligence

Water system operators and utilities play a major role in protecting the public's health. The Department of Health Office of Drinking Water (ODW) considers them valued partners in ensuring safe, reliable drinking water because they are the first line of defense against waterborne diseases and other contaminants.

Although the vast majority of water system operators and utility boards take their responsibility very seriously, occasionally an operator messes up. When that happens, public health protection breaks down, and there are consequences.

Earlier this year, we revoked the licenses of two water system operators, Marcia Zankich and Eugene M. Oppe. Neither can work as a licensed water system operator in Washington State for one year.

Zankich was cited for water quality monitoring and reporting violations as operator of the Shangri La Community Club water system near Concrete, Washington. She was accused of failing to notify customers about bacteria test results, failing for several years to take annual nitrate samples, providing inaccurate information in annual Consumer Confidence Reports, and misleading customers about chemical levels in the water.

In a separate case, Oppe, who worked as a water treatment plant operator for the City of Anacortes, was accused of repeatedly falsifying fluoride measurements in drinking water samples. He not only lost his license for one year, but the city fired him.

"Anacortes did what we'd like to see every system do if they have a serious personnel issue that could affect the health and safety of their customers," said Rich Sarver, water system support manager for ODW. "They reported the situation to us and helped us document the violations."

For very small water systems, the operator may be the only person receiving communications from the state, water sample lab reports and other important information. We encourage city council members, commissioners, and board members to stay involved with their water system. Have regular staff meetings to discuss operations and plan for future needs.

Here's another reason to stay on top of your system operation: We're seeing a national trend where customers who become ill because of contaminants in their public water supply are suing the water system and the operator. In some cases, operators, commissioners, and other staff may be subject to criminal prosecution.

While the number of complaints about water operators is low (less than 1 percent), ODW is receiving more complaints and taking more compliance actions. While some of this increase is due to updated requirements, it also shows our commitment to take enforcement actions when they're needed.

"We take these matters very seriously," said ODW's Sarver. "I want to encourage every water system decision maker and operator: If you're having a problem, contact us and we'll do our best to help you work through it."

For more information

Contact the ODW regional office:

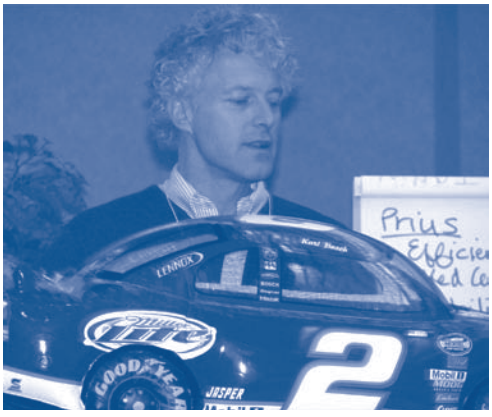
Eastern Region, Spokane (509) 456-3115

Northwest Region, Kent (253) 395-6750

Southwest Region, Tumwater (360) 236-3030

2007 Drinking Water Seminars

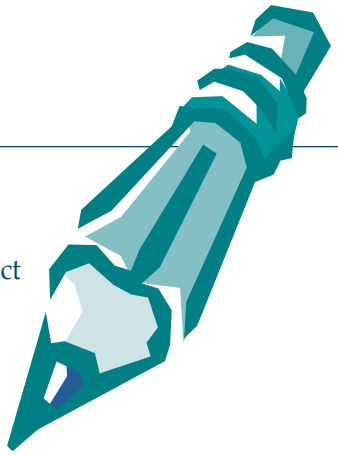
What does your car have in common with your water system? During the 2007 Drinking Water Seminars, the break-out session "Planning: Start Now!" began by exploring the similarities between the two. Presenter Derek Pell from our Northwest Regional Office showed how financing and payments, daily operations, routine maintenance, and emergency breakdowns are important for both. Nearly 350 water system owners, operators and managers attended the statewide fall seminars. Beginning this year, the Office of Drinking Water will have its seminars every other year. Mark your calendar now for the fall of 2009. See you there! *(Photo by Donna Lynch)*



Need Engineering Services?

Writing a Request for Proposal

By Todd Krause, P.E., Northwest Water Systems



Sooner or later your water system will need to complete a project requiring the services of an engineer. How can you choose the best engineer for the job?

Choosing the right engineer can sometimes make the difference between an expensive, complicated fix and a simple solution. It can mean the difference between many change orders and construction delays or a smooth-running project. It can mean the difference between continual operation and maintenance headaches or years of trouble-free service.

Every engineer has a specialty and niche, so before you strike out to find that "special someone" with a slide rule and pocket protector, be sure you KNOW WHAT YOU WANT. It's a good idea to stick with the engineer you've worked with in the past as long as you are happy with his or her performance.

If your engineer retired, didn't meet your expectations, or you have a project that must go out to bid, you may need to issue a request for proposal (RFP). Most operators and managers are familiar with "bid documents" for construction projects. These serve the same purpose as an RFP. However, an engineering RFP is simpler because engineering is a professional field. That means engineers are supposed to practice only in areas in which they are competent and know all the applicable rules and regulations.

When writing the RFP, keep in mind that you and your engineer have different goals that must be met.

Your Goals:

1) Find the most qualified engineer
2) Obtain the most appropriate design
3) Low hassle
4) Save money

Engineer's Goals:

1) Get the job
2) Finish the design
3) Low hassle
4) Make money

To start an RFP, meet with those involved in the project and put together a clear definition of what you need. In other words, KNOW WHAT YOU WANT. Once you clearly define your needs, begin writing the RFP. It should include all of the following elements:

1) Clear definition of the project
2) List of assets and information on-file or "made available upon request"
3) Contact information
4) Deadline
5) Qualifications (references, project list, statement of qualifications)
6) Price, if appropriate (some systems have rules forbidding any mention of cost; systems with taxing authority cannot request a cost)
7) List of deliverables

If the project is large or unusual, you may want to host an "open house." This allows the engineers to get a better feel for the project. It gives you the opportunity to meet the engineers and hear the kinds of questions they ask. An engineer who shows up at a spring source in slacks and black shiny leather shoes probably doesn't have the practical knowledge you need.

When the RFPs come back for review, be sure you KNOW WHAT YOU WANT. Some engineers design Cadillac cars and some design Ford trucks. Both have their place, but it is important to have a design that makes the most sense for your system.

For more information

See ***How to Hire an Engineer (331-044)*** online at http://www.doh.wa.gov/ehp/dw/Publications/331-044_10-06-03_How_to_Hire_an_Engineer.pdf

New & Revised Publications

Sanitary Surveys (331-362) – New! 45-minute video (DVD) explains what a sanitary survey is, and why it is an important part of a water system's program to ensure safe and reliable drinking water.

Tap into Goodness (331-374) – New! A CD full of free, downloadable tools, artwork and ideas to help promote tap water. This tool kit provides a way for Washington utilities to go beyond their Consumer Confidence Reports and market the benefits of tap water to their consumers.

Transition from Stage 1 to Stage 2 Disinfection Byproducts Rule Monitoring (331-377) – New! 2-page fact sheet on new monitoring requirements for total trihalomethanes and haloacetic acids.

Field Safety Manual (331-379) – Revised. 44 pages on personal safety and protection for staff involved in sanitary surveys and other field work.

Office of Drinking Water Fee Schedule (331-228) – Revised. 18-page guidance document contains WACs on the following fees: Water System Evaluation and Project Review and Approval Fees, Water Works Certification Fees, and Drinking Water Operating Permit Fees.

For copies of Office of Drinking Water publications, call (800) 521-0323 or visit the Web site at http://www4.doh.wa.gov/dw/publications/publications.cfm

Use our Listserv to get e-mail copies of new and revised publications. Sign up at http://listserv.wa.gov/cgi-bin/wa?SUBED1=wa-drinkingwaterpub&A=1

Rulemaking Activities

Municipal Water Law

Long Term 2 Enhanced Surface Water Treatment Rule

The Office of Drinking Water is revising the planning and engineering portions of WAC 246-290 to be consistent with the 2003 Municipal Water Law. At the same time, we are adopting the federal Long Term 2 Enhanced Surface Water Treatment Rule as required by the U.S Environmental Protection Agency, and making minor corrections to fix errors and clarify requirements.

In November, we held two public hearings to solicit comments from stakeholders on our proposed rule changes. We are modifying the rule based on comments received. We anticipate adopting the rule on January 10, 2008, with an effective date of February 10, 2008.

For more information about these proposed rule changes, call Michelle Austin, policy and regulation coordinator, at (360) 236-3156, e-mail michelle.austin@doh.wa.gov or visit our Web site at http://www.doh.wa.gov/ehp/dw/municipal_water/mwl_outreach.htm

Ground Water Rule

On October 10, 2007 we received rulemaking authority from the State Board of Health to amend chapter 246-290 WAC, Group A Public Water Systems. The purpose of the rulemaking is to adopt the federal Ground Water Rule. The rule increases public health protection against viral and bacterial contamination for water systems that use groundwater. We are analyzing the rule and will develop a rule adoption schedule early in 2008.

The Ground Water Rule takes a risk-targeted approach to protect groundwater systems at risk of fecal contamination. The rule affects about 3,800 community and non-community water systems that serve groundwater to more than 4.5 million people in Washington. Groundwater systems may need to take source-water quality samples, be inspected more frequently, and may need to treat groundwater in addition to fixing water system problems.

For more information about this proposed rule change, call Theresa Phillips, lead rules coordinator, at (360) 236-3147, e-mail theresa.phillips@doh.wa.gov or visit our Web site at http://www.doh.wa.gov/ehp/dw/our_main_pages/regula.htm

Chlorine Security

Chlorine is one of the most common elements in nature, even more plentiful than carbon. It is in the acid of your stomach and the salt of your tears. In its purest form it saved millions of lives through the disinfection of drinking water, and killed hundreds on the battlefields of World War I.

Chlorine was first used in drinking water in the late 19th century to control the spread of waterborne diseases such as typhoid, cholera, dysentery and gastro-enteritis. In addition to purification, chlorine helps remove odors, controls algae growth in storage tanks and helps to remove unwanted compounds from our drinking water. It is essential in the processing of billions of gallons of drinking water every day.

Many people realize the importance of chlorine as a disinfectant in the purification of drinking water, and as a common agent to keep our swimming pools clean. Most people don't realize how common chlorine is in the creation of several products that affect their everyday lives. Chlorine is used to make about 85 percent of pharmaceuticals. These medicines treat everything from allergies and arthritis, to cancer, depression, diabetes and heart disease. Chlorine also represents the "C" in the common pipe material PVC. Let's not forget that chlorine combines with sodium to make ordinary salt.

Chlorine is a useful chemical building block because it is a very reactive element. This reactivity also makes it very dangerous if you do not handle it properly. Two common household cleaning agents, chlorine bleach and ammonia, will react explosively if mixed together. Calcium hypochlorite (powdered chlorine) can spontaneously combust if left in a garage with oily rags or gas cans. In high concentrations, chlorine gas can cause respiratory distress and even death.

Short-term exposure to chlorine gas is dangerous at concentrations as low as 10 parts per million (ppm). Prolonged exposure at just 3 ppm could be damaging to your health. To help prevent injuries, the Department of Health created ***How to Handle Chlorine Gas Safely (331-364)***. This publication focuses on safe handling and first aid procedures for dealing with gaseous chlorine.

Chlorine gas was first seen as a weapon in 1915 on the battlefields of World War I. Since it is heavier than air, chlorine settles in low areas. This makes chlorine especially dangerous in enclosed spaces.

Today, chlorine gas is a security topic because insurgents in Iraq have used it with conventional bombs to multiply the damaging affects of explosions. This new tactic, combined with the presence of chlorine at most water treatment facilities, makes keeping chlorine secure even more important.

Here are some ways water systems can increase the security of chlorine:

- Improve perimeter security by ensuring access gates are locked.
- Build a relationship with local law enforcement and have them add your facility to their patrol routes.
- Review and update emergency response plans.
- Remind employees that security is everyone's concern and train them to recognize and report suspicious individuals.
- Protect chlorine containers by keeping them in a secured area, and use chemical fill-line locking devices.
- Test samples of any chemical upon delivery.

There also are several ways you can upgrade your security system, from low-cost physical barriers, to high-tech alarm systems.

From left: Kelly Wynn, Ron Grage, and David Doern inspect a chlorine gas diffuser at Evergreen Rural Water of Washington's fall conference.

For more information

A comprehensive three-phase program to address physical security needs was developed by the American Society of Civil Engineers (ASCE), the American Water Works Association and the Water Environment Federation, with a grant from EPA. The program and a detailed list of security tips is online at http://www.asce.org/static/1/wise.cfm

Be prepared to measure chlorine residuals!

Every public water system, even those that don't chlorinate, should have access to a chlorine residual test kit. That may seem like an odd statement; but, unchlorinated systems often use chlorine during unusual events such as main breaks, water outages or unsatisfactory coliform test results. You should consider a test kit an essential addition to your emergency response toolkit.

Chlorine test kits are inexpensive and readily available. If you are not able to purchase a chlorine test kit, ask a neighboring water system if you can borrow their kit if needed. Don't wait until you need to measure the chlorine residuals to obtain test equipment.

Chlorinated systems

Public water systems required to chlorinate continuously must monitor the free chlorine residual levels daily and submit a monthly report to the Office of Drinking Water (ODW). These systems must also test the chlorine residual when they collect a coliform sample. ODW recommends a minimum chlorine residual of 0.2 milligrams per liter (mg/L) prior to the first customer and a trace at all other points in the distribution system unless higher residuals are required.

The only way an operator can determine whether chlorine levels are consistent and adequate for disinfection is to monitor the free-chlorine residual. A drop in the chlorine residual can indicate contaminated water has entered the system or the chlorination equipment has failed.

Unchlorinated systems

Even if your water system doesn't use chlorine for disinfection, you should be prepared to measure chlorine residuals. This is especially true if you will use chlorine to disinfect after an unusual event.

If you are not able to measure the chlorine residual after such an event, you will need to wait about a week from the time chlorine is added to your system before you can collect valid coliform samples. Even then, you can't be certain all the chlorine is flushed out of the water system.

Low levels of chlorine are very difficult to smell. In fact, the only way an operator can demonstrate an absence of chlorine is to measure the chlorine residual and get a result of "non-detectable." Testing may reveal non-detect results sooner than you thought. The sooner you can proceed to collect satisfactory coliform samples, the sooner you can tell your customers that an unusual event is over.

Sandy Brentlinger, coliform program manager at the Southwest Regional Office, explains how to use a chlorine residual test kit. The presence of chlorine residual in drinking water shows the system added enough chlorine to inactivate the bacteria and some viruses that cause disease. It also protects water from recontamination during storage.

Ways to measure chlorine residual

You may purchase a chlorine residual test kit from a water treatment company or a business that sells lab equipment. Digital colorimetric test kits are available for greater accuracy, if needed. Keep the manufacturer's instructions on proper use of the test kit in your Operations and Maintenance Manual and follow the recommended procedures.

The following methods work well and almost anyone can quickly learn how to check chlorine residuals.

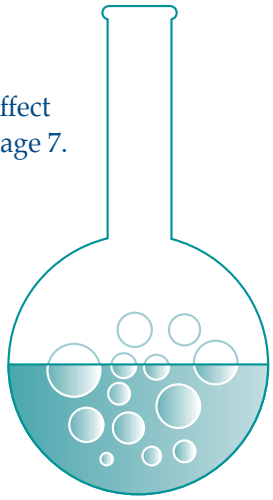
SenSafe Free chlorine test strips – Measures free chlorine levels from 0 to 6.0 ppm in about 40 seconds. Just dip the strip in a water sample and move it around for 20 seconds. Next, remove the strip, shake the water off and wait 20 seconds. Then read the results by comparing the color on the strip to the color chart. EPA recently approved these free-chlorine test strips produced by Industrial Test Systems. Check the bottle for the expiration date. Replace if expired.

Color Comparator Method – Measures free chlorine levels from 0 to 3.5 ppm. Using a hand-held test kit, just mix the water sample with a chemical indicator and then compare the sample color to the test kit's color wheel. The chemical reacts with the chlorine, dyeing the sample a shade of pink. The darker the pink, the higher the

(Continued on Page 10)

Lab Corner

The U.S. Environmental Protection Agency's (EPA) final Ground Water Rule (GWR) went into effect January 8, 2007. For information on state adoption of the rule, see "Rulemaking Activities" on Page 7.



Part of the GWR requires additional water quality testing beyond that already required in the Total Coliform Rule. Parts of the GWR relate to additional sampling locations and the need for additional monitoring if certain conditions exist. There will also be requirements for the laboratories and EPA-approved methods they will use to test for fecal contamination.

The Office of Drinking Water will be working with the Department of Ecology Laboratory Accreditation Program and stakeholders to come to an agreement on the appropriate test methods. We will keep you informed as we develop these policies and procedures.

Continuing education... *(Continued from Page 1)*

- Earn at least 3.0 continuing education units (CEU) or college credits by attending classes that are relevant to drinking water issues.
- Advance by exam within the water distribution manager and water treatment plant operator classifications to a level 2, 3, or 4.
- Achieve certification by exam in a different applicable classification.

The next reporting period ends December 31, 2009 for most certified operators.

Certified water works operators who repeat the same course in a different professional growth reporting period can apply one-half of the CEU earned toward the professional growth requirement. An operator will not receive CEU for courses repeated during the same reporting period.

Consequences of not meeting the requirements

Operators who fail to meet the professional growth requirement will have their certification inactivated. If the operator is employed in a mandatory position, this may put the system out of compliance with the Water Works Certification Program regulation.

To re-achieve certification, an operator who fails to renew must apply as a new operator. There are no appeal rights for operators who fail to meet their professional growth requirement or renew their certification.

For more information

For information about the professional growth requirement, please call Certification Services, Green River Community College at (800) 562-0858, Ext. 2. You may now view and print your professional growth report online at http://www.wacertservices.org

To talk to someone with the ODW Water Works Operator Certification Program, call (800) 525-2536. To see what training is currently available, visit the Web site at http://www.doh.wa.gov/ehp/dw/our_main_pages/training.htm

Chlorine residuals... *(Continued from Page 9)*

chlorine residual. This method is also available in a digital read-out version. Check the reagent packets (pillows) for the expiration date. Replace if expired.

Do not use hot tub or spa chlorine test strips. They do not accurately measure very low levels of chlorine and are not approved for use in drinking water systems.

For more information

Staff at your ODW regional office can provide more information about testing for chlorine residuals and help you determine what type of kit is best for you.

the TOOLBOX

If you have a resource you'd like to share with other readers, please send an e-mail to linda.waring@doh.wa.gov

Safe drinking water tools — CD-ROM

A one-stop collection of the U.S. Environmental Protection Agency's most essential drinking water publications. This updated version of the CD contains more intelligent search features and a full inventory of all publications dated 1997 to 2006. To order a copy of this CD, please call (800) 490-9198 and refer to EPA #816-C-07-001.

Protecting our water

This primer describes how pathogens get into drinking water, how to identify and monitor land use for potential sources of pathogens, and how to prevent contamination of drinking water sources. Includes six case studies showing how communities can reduce threats to their source water. Download your copy free from The Groundwater Foundation catalog (click on "free stuff") online at http://www.groundwater.org/shop/categories.asp

New drinking water listserv

The National Environmental Services Center hosts a listserv that offers the latest drinking water news and products. New information is transmitted to subscribers via e-mail on a regular basis. You can subscribe at http://nesc.wvu.edu/ndwc/ndwc_listserv.htm

Drinking water products

The National Drinking Water Clearinghouse has implemented a fee structure for some of its products. They still offer dozens of free products, but now they can provide low-cost items they couldn't include on a list of "free" products. You can see the entire product list online at http://nesc.wvu.edu/ndwc/ndwc_resources.htm

Who has the best-tasting water in Washington?

Evergreen Rural Water of Washington (ERWoW) is putting a call out to all water systems in Washington, looking for the best-tasting water in 2008. The contest takes place at ERWoW's annual meeting, February 5-7 at the Yakima Convention Center.

In 2007, a panel of three judges sampled water from more than a dozen water systems. The samples were divided into two categories: chlorinated and unchlorinated water.

The winner of the chlorinated category was Eastsound Water Users on Orcas Island.

The winner of the unchlorinated category was Russ Rodocker with Riviera Community Club on Anderson Island, with one judge stating, "It tasted clean, pure and refreshing."

Congressman Adam Smith (left) with taste test winner, Russ Rodocker of Rivieria Community Club on Anderson Island.

If you are a member of Evergreen Rural Water, and would like to enter your water into the 2008 Taste Test, please contact ERWoW to get the official rules. You can call (360) 462-9287, Fax (360) 462-9289, or write to Evergreen Rural Water of Washington, PO Box 2300, Shelton, WA 98584.

The winner of the ERWoW Drinking Water Taste Test will win a trip to the National Rural Water Rally in Washington D.C. in April 2008 to participate in the National Rural Water sponsored Great American Water Taste Test.

Training and Education Calendar: Dec. 2007 - Mar 2008

Date	Topics	Location	Contact	Phone #	Cost/CEU
Dec 3-4	Advanced CCC: Risk Assessment & Hazard Analysis	Auburn	WETRC	1-800-562-0858	$175/1.4
Dec 3-5	Basic Electrical	Richland	WETRC	1-800-562-0858	$50/$295/2.1*
Dec 3-5	Wastewater Treatment Plant Operation Basics	Auburn	WETRC	1-800-562-0858	$285/2.1
Dec 3-7	BAT Certification Class	Auburn	WETRC	1-800-562-0858	$645/3.7
Dec 3-12	BAT Refresher Course	Spokane	WETRC	1-800-562-0858	$330/1.5
Dec 4	Water System Operations Changing Regulations	Stevenson	ERWOW	1-800-272-5981	$50/$100/$110/0.6*
Dec 5	Backflow Incident Investigation & Response	Auburn	WETRC	1-800-562-0858	$115/0.7
Dec 6	Confined Space Entry	Auburn	WETRC	1-800-562-0858	$50/$149/0.7*
Dec 7	Incident Command System & Nims Training	Everett	WETRC	1-800-562-0858	$135/0.8
Dec 10-12	Water Works Basics	Auburn	WETRC	1-800-562-0858	$50/$285/2.1*
Dec 10-14	BAT Certification Course	Spokane	WETRC	1-800-562-0858	$645/3.7
Dec 11	Water System Operations Changing Regulations	Bremerton	ERWOW	1-800-272-5981	$50/$100/$110/0.6*
Dec 13	General Overview of Water Works Operations	Tacoma	ERWOW	1-800-272-5981	TBA
Dec 18-20	BAT Refresher Course	Auburn	WETRC	1-800-562-0858	$330/2.1
Dec 18-20	BAT Refresher Course	Spokane	WETRC	1-800-562-0858	$330/2.1
Jan 7-9	Cross Connection Control Basics And Exam Review	Auburn	WETRC	1-800-562-0858	$275/2.1
Jan 7-8	BAT Certification Course	Auburn	WETRC	1-800-562-0858	$655/3.7
Jan 7-16	BAT Refresher Course	Vancouver	WETRC	1-800-562-0858	$330/1.5
Jan 8-10	Water Treatment Plant Exam Review	Olympia	ERWOW	1-800-272-5981	$200/$250/2.1
Jan 9-11	Water Distribution Certification Exam Review	Auburn	WETRC	1-800-562-0858	$285/2.1
Jan 14-16	Cross Connection Control Exam Review	Moses Lake	ERWOW	1-800-272-5981	$200/$250/2.1
Jan 14-16	Water Distribution Manager Exam Review	Olympia	ERWOW	1-800-272-5981	$200/$250/2.1
Jan 15-17	BAT Refresher Course	Auburn	WETRC	1-800-562-0858	$330/2.1
Jan 15-17	BAT Refresher Course	Spokane	WETRC	1-800-562-0858	$330/2.1
Jan 16-18	Water Distribution Certification Exam Review	Everett	WETRC	1-800-562-0858	$295/2.1
Jam 22-23	Advanced BAT, Troubleshooting & Repair	Auburn	WETRC	1-800-562-0858	$295/1.4
Jan 23-25	Water & Wastewater Disinfection	Everett	WETRC	1-800-562-0858	$285/2.1
Jan 23-25	Water Distribution Certification Exam Review	Spokane	WETRC	1-800-562-0858	$295/2.1
Jan 29-31	Cross Connection Control Exam Review	Olympia	ERWOW	1-800-272-5981	$200/$250/2.1
Jan 29-31	Water Distribution Manager Exam Review	Moses Lake	ERWOW	1-800-272-5981	$200/$250/2.1
Feb 4-5	Fire Hydrants: Installation, Testing, Operation & Repair	Everett	WETRC	1-800-562-0858	$245/1.4
Feb 4-13	BAT Refresher Course	Vancouver	WETRC	1-800-562-0858	$330/1.5
Feb 6	Water Quality Cmplnts: Response, Investigation & Recov	Everett	WETRC	1-800-272-5981	$125/0.8
Feb 6-8	Water & Wastewater Disinfection	Mt. Vernon	WETRC	1-800-562-0858	$285/2.1

**Operators of Group A small water systems serving 3,300 people or less will be charged a $50 registration fee for these classes. This special reduced fee ends December 31, 2007.*

Training and Education Calendar: Dec. 2007 - Mar 2008

Feb 7-8	Process Control & Instrumentation	Spokane	WETRC	1-800-562-0858	$245/1.4
Feb 11-13	Basic Electrical	Everett	WETRC	1-800-562-0858	$295/2.1
Feb 12-14	BAT Refresher Course	Spokane	WETRC	1-800-562-0858	$330/2.1
Feb 12-14	BAT Refresher Course	Auburn	WETRC	1-800-562-0858	$330/2.1
March 1-2	Competent Person Cave-In Protection	Richland	WETRC	1-800-562-0858	$245/1.4
March 6-8	Competent Person for Cave-In Protection	Spokane	WETRC	1-800-562-0858	$239/1.4
March 10-14	BAT Certification Course	Auburn	WETRC	1-800-562-0858	$655/3.7
March 10-19	BAT Refresher Course	Vancouver	WETRC	1-800-562-0858	$330/1.5
March 13-14	Process Control & Instrumentation	Auburn	WETRC	1-800-562-0858	$245/1.4
March 14	Confined Space Entry	Spokane	WETRC	1-800-562-0858	$149/0.7
March 18-20	BAT Refresher Course	Spokane	WETRC	1-800-562-0858	$330/2.1
March 18-20	BAT Refresher Course	Auburn	WETRC	1-800-562-0858	$330/2.1
March 25-26	Advanced BAT, Troubleshooting & Repair	Auburn	WETRC	1-800-562-0858	$295/1.4

**Operators of Group A small water systems serving 3,300 people or less will be charged a $50 registration fee for these classes. This special reduced fee ends December 31, 2007.*

Our training calendar is updated quarterly; please visit the additional training links for current information.

For information about distance learning activities, call WETRC at (800) 562-0858

Additional Training Links:

AWWA King County Subsection Web site—**http://www.kcawwa.org/**

ERWOW Web site—**http://www.erwow.org/**

WETRC Web site—**http://www.wetrc.org/**

AWWA Pacific Northwest Section Web site—**http://www.pnws-awwa.org/**

EPA Electronic Workshops Web site—**http://www.epa.gov/safewater/dwa/electronic.html** (No CEU assigned to these courses.)

Partnership for Water Conservation—**http://www.partners4water.org**

For the complete Training Calendar, visit the Drinking Water Homepage and click on Training - http://www.doh.wa.gov/ehp/dw

NOTE: Links to external resources are provided as a public service, and do not imply endorsement by the Washington State Department of Health.

Cross-Connection Scholarships Available

The Pacific Northwest Section of the American Water Works Association has scholarships available for training to obtain cross-connection control specialist (CCS) certifications. You are eligible to apply if you are an owner or employee of a public water system serving 2,500 or fewer connections, and you do not already have a CCS on staff.

For more information, please call Scott Hallenberg of Tacoma Public Utilities at (253) 502-8215 or e-mail shallenb@cityoftacoma.org

Tap into Goodness... *(Continued from Page 1)*

reasonable amount to ensure the product is wholesome. If they think it's somehow "unclean" or "impure," they will be less willing to pay.

Your customers' perception of value ultimately has an effect on the rates you can charge for water. And this, of course, has everything to do with your ability to maintain and improve infrastructure, attract and retain quality staff, and continue to meet state and federal requirements.

Tap water is an incredible bargain. It costs thousands of times less than bottled water and is, in most cases, a great product. So how can we let people know what they're getting?

Consumer Confidence Reports are an important element in building trust. But not everyone reads them. They only come once a year. And, let's face it, they're pretty complicated. Simpler messages are more likely to be remembered and understood.

The Office of Drinking Water has developed a free toolkit to help utilities of any size easily assemble a tap water awareness campaign. You can use the ideas and artwork in the toolkit to create giveaway items such hats, T-shirts, reusable water bottles, pitchers for meetings, paper cups for sports events, and so on.

We also developed key messages you can use whenever you talk about the quality of your water. You might put them on your billing statements, in your Consumer Confidence Report, in speeches and newspaper interviews, and so on. The more often people hear or read them, the more likely they'll understand.

One great way to get the messages out is through monthly utility bills. We've developed artwork for three different versions of a utility bill stuffer – one you can simply copy, and two you can customize with your utility's name and logo.

The toolkit has many other ideas, too, such as a sample newsletter article and a "tap water quiz." You can download the toolkit, and artwork for the items mentioned above, online at http://www.doh.wa.gov/ehp/dw/tapwater.htm

If you can't access the Web site, call us at (800) 521-0323 and we'll send you a CD.

We'd be happy to help you develop your own version of this campaign, and we'd love to hear how you're using these tools to get the message out. Call Leslie Gates at (360) 236-3098 or send e-mail to tapwater@doh.wa.gov

Key messages:

- "Washington tap water is regulated. Frequent and thorough testing is required to maintain the highest standards."
- "Every year, we send you an annual report explaining the quality of your water—so you know your water is safe."
- "We regularly test your drinking water for contaminants. If we find harmful substances, or the water fails to meet quality standards, we are required to tell you."
- "Tap water costs thousands of times less than bottled water."
- "When you drink tap water from reusable glasses or bottles, there's nothing to throw away or recycle."
- "Tap water is delicious and portable. Just fill your reusable plastic or stainless steel container with fresh, tasty tap water and go. You'll save money and help the environment."
- "To keep you safe, some water utilities treat water with chlorine. If you don't like the taste, use a home filter system (be sure to change the filters according to the manufacturer's schedule) or fill a pitcher and put it in the refrigerator overnight."
- "Tap water is fresh and is subject to more testing and regulation than bottled water."
- "Choose bottled water during water outages, or when you can't get safe tap water. For all other times, you can feel confident just turning on the tap."

2008 Drinking Water Week Awards Nomination Form

In celebration of Drinking Water Week, May 4-10, 2008, the Department of Health's Office of Drinking Water will recognize three water systems and one operator for their commitment to providing safe and reliable drinking water.

Do you know of a water system or water works operator deserving of recognition? Tell us about it. Please submit nominations in writing. Complete this form and attach it to a one-page summary. The summary needs to include convincing information about why the system or operator you are nominating should be selected for recognition. You may also include additional information such as newspaper clippings and other supporting documents.

An ODW committee will review nominations. Our director's management team will make final selections. Award winners will be honored during Drinking Water Week. If you have questions, please contact Donna Lynch at the address below.

If you are submitting more than one nomination, you can either photocopy this form or download it from the Web site at http://www.doh.wa.gov/ehp/dw/drinking_water_nomin.htm

Category *(please check one):*

- ☐ Most Improved – This award has typically been presented to water systems that have overcome a bad situation and are now providing excellent service to their customers.
- ☐ Grace Under Pressure – Recognition for handling a crisis well.
- ☐ Going Above and Beyond – Recognition for providing assistance to neighboring water systems, the community, DOH, and so on.
- ☐ Operator of the Year/Lifetime Achievement – This award honors an individual water system operator for dedication and commitment.

Information about Nominee

Name of System/Individual: _____

_____

City/County: _____

Type of System: ☐ Community ☐ TNC ☐ NTNC ☐ _____

Number of Service Connections: _____

Form Completed by: _____

Name: _____

Title: _____

Representing: _____

City: _____ Phone: _____

E-mail: _____

Nominations must be received by January 31, 2008

Please send nominations to:
Donna Lynch, Office of Drinking Water
PO Box 47822, Olympia, WA 98504-7822
FAX: (360) 236-2252
E-mail: donna.lynch@doh.wa.gov

Moved recently? Changed employers?

Drinking water rules require operators to report changes in writing to the Water Works Operator Certification Program. Operators must submit changes of home address, home phone number and employer information.

Every year operators are assessed a late fee or lose their certification because they fail to report address changes. The Water Works Certification Guideline states:

"Failure to notify the Water Works Operator Certification Program in writing of a change of address does not constitute a reasonable excuse for failure to renew a certificate prior to assessment of the renewal late fee. DOH will not consider appeals from operators assessed the late fee for failure to renew due to an unreported address change."

To update your information:

Write to: Water Works Operator Certification Program
PO Box 47822
Olympia WA 98504-7822

Use the online form:
www.doh.wa.gov/ehp/dw/operatorcertification/op_form.htm

E-mail: larry.granish@doh.wa.gov
Fax: Larry Granish at (360) 236-2252

Be sure to put your operator certification number on all correspondence.

Department of Health usually mails renewal notices to the operator's home address during the second week of November. If you did not receive yours yet, it might have gone to an old address.

If you have questions, call Larry Granish at (360) 236-3141 or (800) 525-2536, Ext. 1.

In This Issue

The following people contributed to the production of this issue of *Water Tap*: Michelle Austin, Sandy Brentlinger, Denise Clifford, Carolyn Cox, Leslie Gates, Larry Granish, Jim Harksen, Tracey Hunter, Gael Kantz, Todd Krause, Donna Lynch, Dick Pedlar, Theresa Phillips, Judy Sides, Paula Smith, Greg Staley, Amy Swecker, Simon Tung, Teresa Walker, Linda Waring (editor).

The Department of Health Office of Drinking Water publishes Water Tap quarterly to provide information to water system owners, water works operators and others interested in drinking water.

Mary Selecky, Secretary of Health

Gregg Grunenfelder, Assistant Secretary of Health
Environmental Health Division

Denise A. Clifford, Director
Office of Drinking Water

Comments, questions, story ideas, articles and photographs submitted for publication are welcome. Please address correspondence to Linda Waring, Water Tap, Office of Drinking Water, P.O. Box 47822, Olympia, WA 98504-7822, or e-mail linda.waring@doh.wa.gov. Past issues are available by contacting the editor or visiting the Web site at http://www.doh.wa.gov/ehp/dw/our_main_pages/watertap.htm

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Last chance!
Attention operators of small systems.
December is the last month you can get training at a reduced fee of $50. You have to pay the full registration fee for all courses beginning January 1, 2008.
See the training calendar on page 12.

Department of Health
Office of Drinking Water
PO Box 47822
Olympia, WA 98504-7822
(800) 521-0323

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Department of Printing